## PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 38107WOP00 AMM/ltm	FOR FURTHER ACTION	See Form PCT/IPEA/416	
International application No. PCT/AU2004/000866	International filing date (day/month/year) 26 June 2004	Priority date (day/month/year)  26 June 2003	
International Patent Classification (IPC) or	national classification and IPC	20 Julio 2003	
Int. Cl. 7 C07C 279/22, C07D 241/24,	•		
Applicant			
BIOTRON LIMITED et al	•	- 11	
· ······		5	
1. This report is the international preliminar	V examination report established by this Int	armational Dualineiras E	
Authority under Article 35 and transmitte	ed to the applicant according to Article 36.	ernational Fremminary Examining	
2. This REPORT consists of a total of 3 s	heets, including this cover sheet.	•	
3. This report is also accompanied by ANN	EXES, comprising:		
a. X (sent to the applicant and to the	International Bureau) a total of 79 sheets,	as follows:	
sheets of the description, classification sheets containing rectifications.  Administrative Instructions	ims and/or drawings which have been amenons authorized by this Authority (see Rule 70)	ded and are the basis for this report and/or 0.16 and Section 607 of the	
sheets which supersede early	er sheets, but which this Authority considers ional application as filed, as indicated in iter	contain an amendment that goes beyond n 4 of Box No. I and the Supplemental	
Relating to Sequence Listing (see	only) a total of (indicate type and number of ated thereto, in computer readable form only Section 802 of the Administrative Instruction	as indicated in the Supplemental Roy	
This report contains indications relating to	o the following items:		
X Box No. I Basis of the report		• ·	
Box No. II Priority		•	
•	of opinion with regard to novelty, inventive s	tep and industrial applicability	
Box No. IV Lack of unity of inv	•		
X Box No. V Reasoned statement citations and explana	under Article 35(2) with regard to novelty, in ations supporting such statement	nventive step or industrial applicability;	
Box No. VI Certain documents c	ited		
Box No. VII Certain defects in the	e international application		
Box No. VIII Certain observations	on the international application		
Date of submission of the demand	Date of completion of the	ne renort	
6 April 2005	8 June 2005		
lame and mailing address of the IPEA/AU	Authorized Officer	Authorized Officer	
USTRALIAN PATENT OFFICE			
O BOX 200, WODEN ACT 2606, AUSTRALIA -mail address: pct@ipaustralia.gov.au	G. D. HEARDER		
acsimile No. (02) 6285 3929	Telephone No. (02) 628	Telephone No. (02) 6283 2553	

International application No.

PCT/AU2004/000866

Box No. I Basis of the report
1. With regard to the language, this report is based on the international application in the language in which it was filed, unles otherwise indicated under this item.
This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
international search (under Rules 12.3 and 23.1 (b))
publication of the international application (under Rule 12.4)
international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):
the international application as originally filed/furnished
X the description:
pages 1-119 as originally filed/furnished
pages* received by this Authority on with the letter of pages* received by this Authority on with the letter of
X the claims:
pages as originally filed/furnished
pages* as amended (together with any statement) under Article 19
pages* 120-199 received by this Authority on 26 April 2005 with the letter of 26 April 2005
pages* received by this Authority on with the letter of  X the drawings:
pages 1/14-14/14 as originally filed/furnished
pages* received by this Authority on with the letter of
pages* received by this Authority on with the letter of
a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
The amendments have resulted in the cancellation of:
the description, pages
the claims, Nos.
the drawings, sheets/figs
the sequence listing (specify):
any table(s) related to the sequence listing (specify):
This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
the description, pages
the claims, Nos.
the drawings, sheets/figs
the sequence listing (specify):
any table(s) related to the sequence listing (specify):
If item 4 applies, some or all of those sheets may be marked "superseded."

International application No.

PCT/AU2004/000866

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

#### Statement Novelty (N) **YES** Claims 1-165 NO Claims YES Inventive step (IS) Claims 1-165 NO Claims YES Industrial applicability (IA) Claims 1-165 Claims NO

#### Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purposes of this report:

- D1 US 4894376 A
- D2 DD 200618 A
- D3 The Merck Index, Twelfth Edition. Susan Budavari, Ed. Entry 426: Amiloride
- D4 BREDERECK H. et al. Chem. Ber. 1970, vol. 103, pages 245-255
- D5 DODD D. S. et al. Tetrahedron Lett. 2001, vol. 42, pages 1259-1262
- D6 ITO G. et al. Chem. Pharm. Bull. 1961, vol. 9, 245-248
- D7 FR 1435379
- D8 STN Database file CA, Abstract No. 67:100033
- BODIPY® FL amiloride. Catalogue Number B-6905. Molecular Probes, Inc. 1999. [retrieved on 21-09-2004]. Retrieved from the Internet using The Way Back Machine (www.archive.org): <URL: <a href="http://web.archive.org/web/19990831162814/http://www.probes.com/servlets/product?item=6905">http://web.archive.org/web/19990831162814/http://www.probes.com/servlets/product?item=6905</a>>
- D10 WO 2003/063869

#### Claims 1-165

No individual citation or obvious combination of citations disclose the features of the claims

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Int. Cl. 7 C07C 279/22, C07D 241	/24, A61K 31/155, A61P 31/12		
Applicant BIOTRON LIMITED et al			
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2. This REPORT consists of a total of	3 sheets, including this cover she	et.	
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a. X (sent to the applicant and to	the International Bureau) a total of	f 79 sheets, as follows:	
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Administrative Instruct	•	ority considers contain an amendment that goes beyond	
		ndicated in item 4 of Box No. I and the Supplemental	
a sequence listing and/or tab		and number of electronic carrier(s)), containing able form only, as indicated in the Supplemental Box ative Instructions).	
This report contains indications rela	ing to the following items:	•	
X Box No. I Basis of the re	port	•	
Box No. II Priority			
Box No. III Non-establish	nent of opinion with regard to nove	elty, inventive step and industrial applicability	
Box No. IV Lack of unity of	of invention	•	
	ment under Article 35(2) with regardless supporting such statem	ard to novelty, inventive step or industrial applicability; ent	
Box No. VI Certain docum	ents cited		
Box No. VII Certain defects	in the international application		
Box No. VIII Certain observe	ations on the international applicat	on	
Date of submission of the demand Da		Date of completion of the report	
26 April 2005		8 June 2005	
Name and mailing address of the IPEA/AU		Authorized Officer	
AUSTRALIAN PATENT OFFICE			
PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au		G. D. HEARDER	
Facsimile No. (02) 6285 3929		Celephone No. (02) 6283 2553	

International application No.

PCT/AU2004/000866

Box	x No. I	Basis of the report
1.		regard to the language, this report is based on the international application in the language in which it was filed, unless rwise indicated under this item.
٠.		This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
		international search (under Rules 12.3 and 23.1 (b))
	•	publication of the international application (under Rule 12.4)
		international preliminary examination (under Rules 55.2 and/or 55.3)
<b>2.</b>	furni	regard to the elements of the international application, this report is based on (replacement sheets which have been shed to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally and are not annexed to this report):  the international application as originally filed/furnished
<b>-</b> .	[··]	the description:
·	X	pages 1-119 as originally filed/furnished
		pages* received by this Authority on with the letter of
	·	pages* received by this Authority on with the letter of
	X	the claims:
		pages as originally filed/furnished
		pages* as amended (together with any statement) under Article 19 pages* 120-199 received by this Authority on 26 April 2005 with the letter of 26 April 2005
1		pages* received by this Authority on with the letter of
	X	the drawings:
		pages 1/14-14/14 as originally filed/furnished
		pages* received by this Authority on with the letter of
	<u></u>	pages* received by this Authority on with the letter of
	<u> </u>	a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
. <b>.</b>		The amendments have resulted in the cancellation of:
••		the description, pages
		the claims, Nos.
		the drawings, sheets/figs
		the sequence listing (specify):
		any table(s) related to the sequence listing (specify):
4.	r	This report has been established as if (some of) the amendments annexed to this report and listed below had not been nade, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
		the description, pages
•		the claims, Nos.
	•	the drawings, sheets/figs
		the sequence listing (specify):
		any table(s) related to the sequence listing (specify):
k	If iten	n 4 applies, some or all of those sheets may be marked "superseded."

International application No.

PCT/AU2004/000866

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citation	s and explanations supporting such statement

1.	Statement	•		•
·	Novelty (N)	Claims 1	1-165	YES'
		Claims		NO
	Inventive step (IS)	Claims 1	l-165	YES
		Claims		NO
	Industrial applicability (IA)	Claims 1	l-165	YES
•	•	Claims	•	NO ·

Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purposes of this report:

- D1 US 4894376 A
- D2 DD 200618 A
- D3 The Merck Index, Twelfth Edition. Susan Budavari, Ed. Entry 426: Amiloride
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- D5 DODD D. S. et al. Tetrahedron Lett. 2001, vol. 42, pages 1259-1262
- D6 ITO G. et al. Chem. Pharm. Bull. 1961, vol. 9, 245-248
- D7 FR 1435379
- D8 STN Database file CA, Abstract No. 67:100033
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- D10 WO 2003/063869

#### Claims 1-165

No individual citation or obvious combination of citations disclose the features of the claims

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